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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/837,055

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EXAMINER

SHAW, PELING ANDY

ART UNIT

PAPER NUMBER

2144

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/837,055	Applicant(s) HIRASAWA, MASAHIDE	
	Examiner PELING A. SHAW	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,10,11,15 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,10,11,15 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment received on 12/31/2007 has been entered into record. Claims 1, 10-11 and 15 are amended. Claims 2-3 and 12-13 are cancelled. Claims 18-21 are new. Claims 1, 10-11, 15 and 18-21 are currently pending.
2. Applicant's submission filed on 07/20/2007 was entered. Claims 1 and 11 were amended. Claims 16-17 were cancelled.
3. Amendment received on 01/04/2007 was entered into record. Claims 1-2 and 11-12 were amended. Claims 16-17 were new.
4. Applicant's submission filed on 06/26/2006 was entered. Claims 1-3, 11-13 and 15 were amended. Claims 7 and 14 were cancelled.
5. Amendment received on 12/12/2005 was entered. Claims 1-3, 7 and 10 were amended. Claims 4-6 and 8-9 were cancelled. Claims 11-15 were new.

Priority

6. This application has claimed priority on JAPAN 119029/2000 04/20/2000. The filing date is 04/18/2001.

Specification

7. Applicant has replaced the abstract on page 23 of applicant's original specification with a new abstract. The term of "connection unit" is used extensively through the new abstract and amended claim language. This term is not found in applicant's original specification or claim language. Applicant seems to intend replacing the term of "port" used extensively in applicant's original specification or claim language. However, considering the possible broad interpretation

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on the term of “connection unit” beyond the term of “port” in applicant’s original specification or claim language, this abstract replacement is not accepted.

Claim Rejections - 35 USC § 112, first paragraph

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 10-11, 15 and 18-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the original specification and claims in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- a. Amended claim 1, 10-11, 15 language and newly added claim 18-21 language have used the term of “connection unit” that is not found in applicant’s original specification or claim language. The closest term exists in applicant’s original specification or claim language to this term of “connection unit” is “port”. Since there is no usage of “connection unit” and the term could be interpreted beyond the term of “port”, these usage of “connection unit” still modify the scope of the invention and introduce new subject matter into the application. It would require undue experimentation for one of ordinary skill in the networking art at the time the invention was made to be able to add and test all these functions inclusively rather than just pick a particular function for implementation. Claims 1, 10-11, 15 and 18-21

are thus rejected. For the purpose of applying art, the term of “connection unit” is read as “port” with the consideration of the context of “port”.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 10-11, 15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seong (US 6785720 B1), hereinafter referred as Seong in view of Johnson et al. (US 5584039 A), hereinafter referred as Johnson.

- a. Seong shows (claim 1) a communication control apparatus (column 1, lines 21-26: set-top box) comprising: a first connection unit which connects to said first segment of a network (column 1, lines 46-53: connection between devices); a second connection unit which connects to said second segment of a network (column 1, lines 46-53: connection between device); a CIP header detecting unit adapted to detect whether an isochronous packet received by said first connection unit includes a CIP (common isochronous packet) head conforming to IEC 61883 standard (Fig. 1-3; column 1, line 46-column 2, line 10: IEC 61833 over IEEE 1394 to provide control and connection management of A/V using IPCR and OPCR, IEC 61883 define CIP header structure, CIP header has information on source stream); and a control unit

configured to determine, using the CIP header, whether to disable relaying the isochronous packet received by said first connection unit to said second connection unit (column 5, lines 47-67: OPCR to control the channel; Fig. 6-7; column 4, line 65-column 5, line 6: power on/off), wherein said control unit controls to provide another isochronous packet to said second connection unit in lieu of the isochronous packet received by said first connection unit (column 1, lines 24-53; IEEE 1394 transport digital stream), if said control unit determines that relaying the isochronous packet received by said first connection unit to said second connection unit is disabled (column 5, lines 47-67: OPCR to control the channel). Seong does not explicitly show wherein said control unit controls to provide another isochronous packet including dummy data or null (column 3, line 5-7; column 16, line 47-55).

- b. Johnson shows (column 16, line 47-55) the channel subsystem might permit the definition of dummy subchannels to be used for synchronization channel programs. The use of dummy subchannels would simplify the processing of halt or clear functions and might be defined to support only the control no-operation, basic sense and sense identification input/output device commands; and (column 17, lines 4-15) the definition and use of dummy subchannels to support the synchronization of coupled channel programs in an analogous art for the purpose of coordinating execution of multiple concurrent channel programs.
- c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Seong's functions of connecting server device over

- IEEE 1394 using IEC 61883 with Johnson's functions of using dummy subchannels in synchronization channel programming.
- d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to using legacy channel programming synchronization technique as per Johnson's teaching in as applied in IEEE 1394 isochronous channel connection based device connection in home network application as per Seong (column 1, lines 24-53)'s teaching.
- e. Regarding claim 10, Seong shows wherein said first and second ports conform to the IEEE 1394-1995 standard (Fig. 1-3; column 1, line 46-column 2, line 10: IEC 61833 over IEEE 1394).
- f. Regarding claim 18, Seong shows wherein said control unit enables relaying the isochronous packet received by said first connection unit to said second connection unit, if the isochronous packet received by said first connection unit does not include the CIP header (column 1, lines 46-53: it is not enough to perform data transmission between devices with only an IEEE 1394 specification. Namely, rules with respect to processes of securing a connection between devices for transmitting and receiving A/V data and an isochronous channel for transmitting the A/V data should be established between devices. For this, an IEC 61883 specification exists; column 2, lines 42-49: CIP is used to implement IEC 61883 functions).
- g. Regarding claim 19, Seong shows wherein said control unit detects a node ID of a source node from the CIP header in order to determine whether to disable relaying the isochronous packet received by said first connection unit to said second connection

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unit (Fig. 5; column 4, lines 29-56: under conditions, connection to set-top box is performed; column 4, line 57-column 5, line 6: source device and POWER ON and POWER OFF).

- h. Claims 11, 15 and 20-21 are of the same scope as claims 1, 10 and 18-19. There are rejected for the same reasons as for claims 1, 10 and 18-19.

Together Seong and Johnson disclosed all limitations of claims 1, 10-11, 15 and 18-21.

Claims 1, 10-11, 15 and 18-21 are rejected under 35 U.S.C. 103(a).

Response to Arguments

10. Applicant's arguments filed on 12/31/2007 have been fully considered, but they are not persuasive.

- a. Applicant's amended changes in specification (abstract) and claim language using the term of "connection unit" are reviewed in light of applicant's original specification and claim language. It is not accepted and rejected as per sections 7-8 above. The current claim language is read as with the term of "port" instead of the term of "connection unit" in consistent with applicant's original specification and claim language. Examiner has searched based upon the amended claim change and newly added claim 18-21 language. Examiner has found that Seong and previous applied prior art Johnson in combinatory seems to have all the limitations. Claims 1, 10-11, 15 and 18-21 rejections are updated as above in section 9. Applicant has reviewed the Argument and the Response as per office action dated 10/03/2007 and 10/04/2006. It seems that item c of section 7 in the office action dated 10/03/2007 and item c of section 5 in the office action dated 10/04/2006 still pertain the following discussion on applicant's current argument.
- b. Applicant has argued that Seong set-top box does have the limitation of the first port (connection unit) and the second port (connection unit). As IEEE 1394 and IEC 61883 is described above in Seong's column 1, line 24-column 2, line 3 as connection and connection over a bus transport mechanism, Seong has further described in lines 32-62 of column 2 that DTV and PC are connected over IEEE 1394; TCP/IP and HTTP are run over IEEE 1394. As further described in Seong's line 22 of column 4

through line 6 of column 5, the set-top box seems to be the connection device that bridge between the source and DTV. Seong has stated (column 4, lines 61-64) data is not output from the set-top box and (column 4, line 67-column 5, line 6) using POWER ON and POWER OFF to control the flow of data. One skill in the art of cable television knows well that a set-top box is used to select, control and connect cable programming to the television set as shown by Seong. Thus the set-top box does have input and output for TV and cable programming connection.

- c. Applicant has amended claims 1 and 11 with the limitation of “including dummy data or null data”. Examiner has searched and found Johnson was used in covering this limitation as per office action dated 02/23/2006. Seong has described similar situation (column 4, line 67-column 5, line 6) where channel display is on or off as per POWER ON and POWER OFF using IEC 61883.
- d. Applicant’s argument of “merely using the IEEE 1394-1995 and IEC 61883 specification cannot and does not permit selectively determining whether to relay the isochronous packet output from the output device, by using a CIP header included in the isochronous packet. It seems to indicate the function of determination is independent of IEEE 1394-1995 and IEC 61883 specification. Seong, as quoted in the claim rejection section 9 above various references, seems to show claim 1’s limitations of CIP header detecting and control functions as per item a of section 9 on claim 1 rejection and as per further discussion in items b-c above. Seong’s set-top box as per description in his Background and through Description of the Preferred Embodiment seems to perform the function of the communication control apparatus,

including its description of using IEC 61883 (Fig. 2) to select, control and connection service device (Fig. 8) over IEEE 1394-1995 (Fig. 2-3).

- e. It is the Examiner's position that Applicant has not submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art. As it is Applicant's right to claim as broadly as possible their invention, it is also the Examiner's right to interpret the claim language as broadly as possible. It is the Examiner's position that the detailed functionality that allows for Applicant's invention to overcome the prior art used in the rejection, fails to differentiate in detail how these features are unique (see item a in section 6). As the claimed invention seems to draw a direct interpretation what is to be done according to and thus conforming industrial standards as applied to specific application. The cited prior art has also shown all limitation as claimed. It is clear that Applicant must be able to submit claim language to distinguish over the prior arts used in the above rejection sections that discloses distinctive features of Applicant's claimed invention. It is suggested that Applicant compare the original specification and claim language with the cited prior art used in the rejection section above or the Remark section below to draw an amended claim set to further the prosecution.
- f. Failure for Applicant to narrow the definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant's intent to broaden claimed invention. Examiner interprets the claim language in a scope

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parallel to the Applicant in the response. Examiner reiterates the need for the Applicant to more clearly and distinctly define the claimed invention.

Remarks

11. The following pertaining arts are discovered and not used in this office action. Office reserves the right to use these arts in later actions.

- a. Chou et al. (US 6363428 B1) Apparatus for and method of separating header information from data in an IEEE 1394-1995 serial bus network
- b. Gerszberg et al. (US 6396531 B1) Set top integrated visionphone user interface having multiple menu hierarchies
- c. Stallkamp (US 6522649 B1) Method of distributing video reference signals as isochronous network packets
- d. IEC 61883-1, Consumer audio/video equipment-digital interface-Part 1: General, First edition, 1998-02, pp.1-77

Conclusion

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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/P. A. S./

Examiner, Art Unit 2144

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2144

<div>Application Number</div> <div></div>	Application/Control No.	Applicant(s)/Patent under Reexamination	
	09/837,055	HIRASAWA, MASAhide	
	Examiner	Art Unit	
	PELING A. SHAW	2144	